

REMARKS

Claims 78, 82-84, 89, 90 and 105 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Gough et al '290. This rejection is respectfully traversed with respect to these claims as amended herein.

These claims as amended now variously recite “the deployed shape of the elongated energy portion having a contour of an inner wall of a heart to substantially conform the elongated energy delivery portion to the inner wall of the heart with the distal end of the elongated shaft penetrating through the inner wall of the heart,” and “said elongated energy delivery portion is pre-shaped to extend substantially straight from the distal end at a skewed angle relative to a longitudinal axis of the shaft,” and “the energy delivery portion is configured to produce an electromagnetic field that is concentrated on a side of the energy delivery portion oriented proximate to the inner wall of the heart in order to produce a linear lesion at the inner wall of the heart.”

In addition, the dependent claims also recite such additional limitations as “said energy delivery portion extends at an angle greater than 0 and less than 90 degrees relative to the longitudinal axis of the shaft,” or “energy delivery portion extends at an angle of between about 45 and 135 degrees relative to the longitudinal axis of the shaft,” or “the energy delivery portion is configured to

substantially conform to at least a portion of a lateral inner wall of the right atrium.”

These aspects of the claimed invention are not disclosed or even suggested by Gough et al ‘290 which is understood to rely upon secondary antennae that can be deployed laterally from within a rigid primary antennae in order to supply ablation energy to a tissue mass within the bounded region designated as the ablation area or ablation volume between the primary and secondary antennae. More specifically, the disclosure of this reference is deficient of a microwave energy delivery portion that is deployed from the distal end of a shaft through and beyond the inner wall of a beating heart, in a contour of the wall of the heart. These recitations in Applicants’ claims are not merely an expression of an intended use but are specific definitions of the operational shape and configuration of the elements of the claimed invention.

In contrast, the rigid primary antennae and the flexible secondary antennae as deployed from the distal end of the primary antennae in this cited reference are configured to radiate energy omnidirectionally within the volume of tissue to define the extent of an ablative volume within the volume of tissue. There is no disclosure here of an antenna deployed from beyond a surface or wall penetrated by the distal end of a shaft, in a manner as claimed by Applicants, in order to configure the antenna substantially to the contour of the penetrated wall. It is

therefore respectfully submitted that amended claims 78, 82-84, 89, 90 and 105 are not anticipated by, but instead are patentably distinguishable over, the cited art.

Claims 36, 57, 100 and 101 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Gough et al '290 in view of Kasevich '490. This rejection is respectfully traversed with respect to these claims as amended herein.

These claims specifically recite "the antenna device being configured to be deployed into the interior of the organ or duct through the sharpened distal end of the introducer with a deployed shape that is substantially straight and at a skewed angular orientation relative to a longitudinal axis of the introducer to orient the antenna device in a direction towards and substantially parallel to an interior portion of the penetrated wall," or "a microwave energy delivery portion slidably disposed within the probe distal end portion of the probe, said sharpened distal end of said probe being configured to penetrate the wall of the beating heart to facilitate deployment from the distal end within an interior cavity of the beating heart of the microwave energy portion configured substantially to match the shape of the interior portion of the wall," or "the longitudinal energy delivery member being deployable from the distal end of the probe within the cavity of the organ, and being configured to conform to an inner wall of the organ for producing a substantially linear lesion on the inner wall of the organ."

These aspects of the claimed invention facilitate ablating tissue from a surface or wall of a tissue structure, with a degree of uniformity attributable to contouring the antenna substantially in the shape of the wall or surface that is penetrated by the shaft from which the antenna is deployed.

These aspects of the claimed invention are not shown or suggested by the references considered either alone or in the combination proposed by the Examiner. The deficient disclosure of Gough et al '290 is discussed in the above Remarks. In addition, this reference is understood to disclose ablating tissue within a tissue volume rather than from a surface or wall of the tissue volume using an antennae that is shaped to the contour of such surface, in a manner as claimed by Applicants. Such shaping of the deployed antenna as claimed is not merely an expression of intended use but is a specific definition of the shape of the deployed antenna for ablating tissue in a tissue surface or wall that is penetrated by a shaft from which the antenna is deployed.

And, Kasevich '490 is noted to disclose an ablating antenna that is carried by a shaft, but that is surrounded by a balloon tip or other dielectric tip at the distal end of the shaft, and that is not deployed beyond the distal end to penetrate tissue or to be shaped in a deployed configuration in accordance with surface contour of tissue to be ablated.

Thus, merely combining Gough et al '290 and Kasevich '490 in the manner as proposed by the Examiner fails to establish even a *prima facie* basis, including all recited elements of Applicants' claimed structure, from which a proper determination of obviousness can be made. It is therefore respectfully submitted that claims 36, 57, 100 and 101 as amended are now patentably distinguishable over the cited art.

Rejected claim 51 has been cancelled.

The Examiner's analyses of Applicants' arguments filed January 10, 2005 are noted, with a suggested correction of those analyses that are essentially focused on mere intended use, to recognize the specifically-claimed shape of the deployed antenna in the contour of the wall or surface of tissue to be ablated, for the described operative purposes.

Reconsideration and allowance of claims 36, 57, 78, 82-84, 89-101 and 105, along with allowed claims 37-39, are solicited.

Respectfully submitted,
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